

# PATENT APPLICATION

Attorney Docket No. A02161US (98683.1)

## TITLE OF THE INVENTION

"Safety System for underwater cutting"

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## CROSS-REFERENCE TO RELATED APPLICATIONS

Priority of U.S. Provisional Patent Application Serial No. 60/397,510, filed 19 July 2002, incorporated herein by reference, is hereby claimed.

## STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

10 Not applicable

## REFERENCE TO A "MICROFICHE APPENDIX"

Not applicable

## BACKGROUND OF THE INVENTION

### 1. Field of the Invention

15 The present invention relates to underwater cutting devices. More particularly, the present invention relates to cutting pipes under water.

### 2. General Background of the Invention

The following U.S. Patents are incorporated herein by reference:

5,238,069; 5,259,458; 4,919,210.

## 20 BRIEF SUMMARY OF THE INVENTION

The present invention is an improvement to the device disclosed in U.S. Patent No. 5,238,069.

## BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

25 For a further understanding of the nature, objects, and advantages of the present invention, reference should be had to the following detailed description, read in conjunction with the following drawings, wherein like reference numerals denote like elements and wherein:

Figure 1 is an elevational view of the preferred embodiment of the apparatus of the present invention;

30 Figure 2 is a bottom end view of the preferred embodiment of the apparatus of the present invention;

Figure 3 is a top end view of the preferred embodiment of the apparatus of the present

invention;

Figure 4 is an elevational view of an alternative embodiment of the apparatus of the present invention;

Figure 5 is a side view showing related prior art apparatus in use; and

5 Figure 6 is a side, partially cutaway view showing related prior art apparatus.

#### DETAILED DESCRIPTION OF THE INVENTION

The attached drawings (Figures 1-4) show the present invention and prior related devices.

The present invention is an improvement to the device disclosed in U.S. Patent No. 5,238,069. It differs in the following respects: (1) the jet tubes run from the external supply ring  
10 through the wall of the tool and turn down on the inside of the tool; and (2) the supply ring is also outfitted with air supply connections that allow for injecting air through the jet pipes to create a vacuum to pull the oxygen through the cut and up the annulus.

Recent experience with the invention has caused the inventor to invent another embodiment which is similar to the invention shown in the drawings, but with a shorter distance  
15 from the mudline base plate to the top (preferably just about 19 inches above the plate) and about 19' 6" below the plate.

All measurements disclosed herein are at standard temperature and pressure, at sea level on Earth, unless indicated otherwise. All materials used or intended to be used in a human being are biocompatible, unless indicated otherwise.

20 The foregoing embodiments are presented by way of example only; the scope of the present invention is to be limited only by the following claims.